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WHAT IS CLAIMED IS:

1. A semiconductor device comprising:

(a) a semiconductor substrate having a first surface and a second surface;

(b) an active region formed on the first surface of the substrate;

(c) a first semiconductor element formed on the active region, including

first and second channel regions formed so that the width directions of the channel regions are substantially perpendicular to each other,

a first source electrode and a first drain electrode, which are formed adjacent to the first and second channel regions and opposing to each other with the first and second channel regions therebetween, and which are in ohmic contact with the active region, and

a first gate electrode which is formed on the first and second channel regions and along the first source electrode and the first drain electrode, and which is bent at least one bending position; and

(d) a second semiconductor element formed on the active region so as to be adjacent to the first semiconductor element, including

third and fourth channel regions which are formed adjacent to the first and second channel regions,

respectively, with the first source electrode or the first drain electrode therebetween,

a second source electrode or a second drain electrode which is formed opposing the first drain electrode or the first source electrode through the third and fourth channel regions, and which is in ohmic contact with the surface of the active region, and

a second gate electrode which is formed on the third and fourth channel regions and along the second source electrode or the second drain electrode, and which is bent at least one bending position.

2. The semiconductor device according to claim 1,

wherein the source electrode and the drain electrode are ~~composed of~~ band-like electrodes, and the bending position of the first gate electrode and the bending position of the second gate electrode lie ~~are arranged~~ on a straight line substantially ~~in~~ parallel with a ~~the~~ longer side of the active region.

3. The semiconductor device according to claim 1, further comprising:

a source-drawing wire which is formed on the source electrode and along the source electrode;

a source common wire connected to the source-drawing

wire;

a drain-drawing wire which is formed on the drain electrode and along the drain electrode;

a drain common wire connected to the drain-drawing wire; and

a gate common wire connected to the gate electrode, wherein the drain common wire is formed opposing the source common wire and the gate common wire through the active region, and wherein the source-drawing wire is connected to the source common wire through an air bridge across the gate common wire.

4. The semiconductor device according to claim 1, further comprising

insulating regions ~~formed~~ on the semiconductor substrate and under the bending position of the first gate electrode and the bending position of the second gate electrode.

5. The semiconductor device according to claim 1,

wherein the first source electrode has a ~~is formed in the~~ rectangular shape, two sides of which are adjacent to the first and second channel regions, respectively, and wherein the first source electrode is connected to a conductive film ~~formed~~ on the second surface of the semiconductor substrate,

through a via-hole ~~formed~~ in the first source electrode.

6. The semiconductor device according to claim 5, further comprising:

insulating regions ~~formed~~ on the semiconductor substrate and under the bending position of the first gate electrode and the bending position of the second gate electrode.

7. The semiconductor device according to claim 6,

wherein the insulating region is formed so that the width of the first or second channel region is narrower than the width of the source electrode adjacent to the channel region.

8. The semiconductor device according to claim 5,

wherein the first gate electrode has two bending positions at which the bending directions of the first gate electrode are reversed to each other, and wherein the second gate electrode has such two bending positions that allow the second gate electrode to extend substantially in parallel with the first gate electrode.

9. The semiconductor device according to claim 5,

wherein the first gate electrode and the second gate

electrode are ~~formed in~~ parallel to ~~with~~ each other and are connected to a common pad electrode at a ~~which is formed on the~~ bending position of the first gate electrode and a ~~the~~ bending position of the second gate electrode.

10. The semiconductor device according to claim 1, wherein the semiconductor substrate is an ~~made of~~ semiconductor material electrically isotropic compound.

11. The semiconductor device according to claim 1, wherein the first ~~gate~~ electrode and the second gate electrode share one of the first source electrode and ~~or~~ the first drain electrode.

12. The semiconductor device according to claim 1, wherein the first gate electrode is bent at ~~in~~ a right angle ~~vertical direction~~ at a ~~the~~ bending position.

13. The semiconductor device according to claim 1, wherein an ~~the~~ angle formed between a ~~by the~~ width direction of the first gate electrode and a ~~the~~ longer side direction of the active region is substantially 45°.

14. A process for manufacturing a semiconductor device, comprising the steps of:

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setting a semiconductor substrate having a first surface and a second surface,

forming an active region on the first surface of the substrate,

forming a first channel region and a second channel region on the active region so that the width directions of both channels are substantially perpendicular to each other,

forming a gate electrode on the first and second channel regions so that the gate electrode bends at a bending position and extends along the first and second channel regions, and

forming a source electrode and a drain electrode substantially in parallel with the gate electrode so that the source electrode and the drain electrode oppose to each other through the first and second channel regions.

15. The process according to claim 14, further comprising a ~~the step of~~:

forming an insulating region on the semiconductor substrate and under the bending position of the gate electrode.

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16. The process according to claim 14, further comprising the steps of:

forming a conductive film on the second surface of the

semiconductor substrate, and

electrically connecting the source electrode to the conductive film through the via-hole penetrating the semiconductor substrate.

17. The process according to claim 16,

wherein the source electrode is formed in the shape of a rectangle.